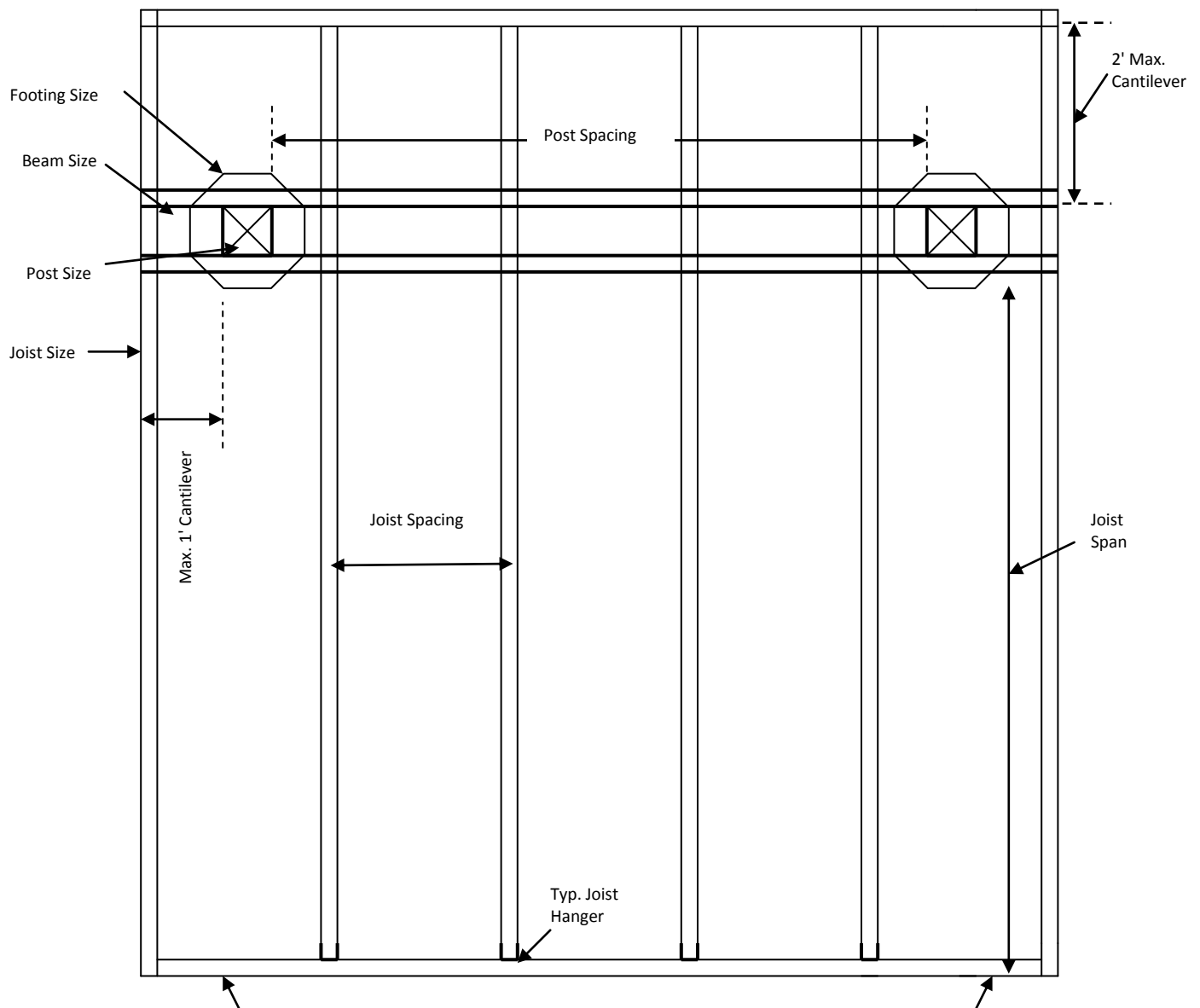


Simple Deck Plan View * All lumber shall be approved pressure treated -or- naturally decay resistant.

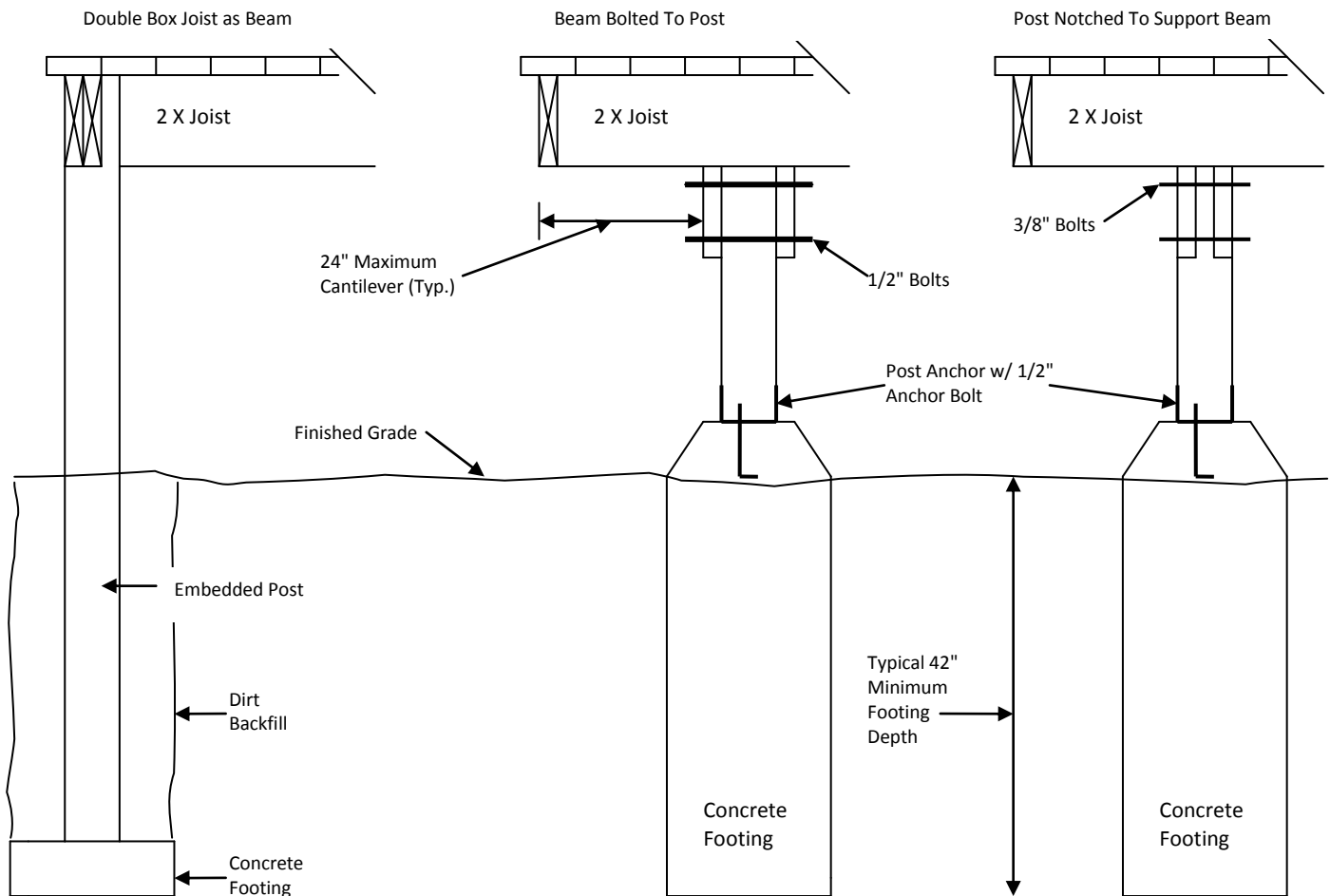
Residential: For one and two family dwellings and individual units of multi family.



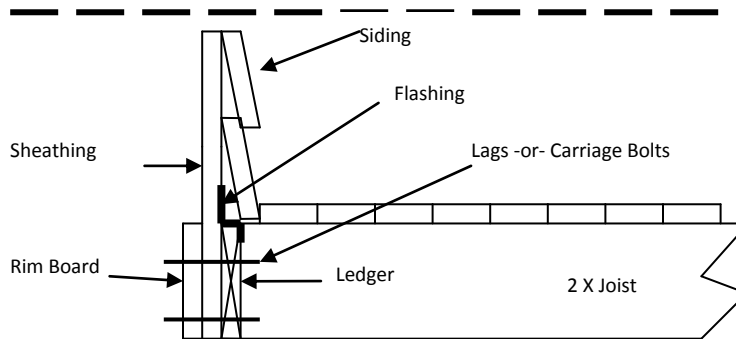
2X Ledger attached to house framing structure and/or foundation, provide flashing.

NOTE: All fasteners shall be of hot-dipped galvanized steel, stainless steel, silicon bronze or copper.

Residential: For one and two family dwellings and individual units of multi family.



NOTE: All fasteners shall be of hot-dipped galvanized steel, stainless steel, silicon bronze or copper.
Exception - 1/2" diameter or greater steel bolts



Fasten the ledger board to the house framing or the foundation.

Flash the ledger board to keep water from seeping behind the ledger and infiltrating the wall.

See fastener schedule

Residential: For one and two family dwellings and individual units of multi family.

Guards: Porches, balconies or raised floor surfaces located more than 30 inches above the floor or grade below shall have guards not less than 36 inches in height. Open sides of stairs with a total rise of more than 30 inches above the floor or grade below shall have guards not less than 34 inches in height measured vertically from the nosing of the treads.

Guard opening limitations: Required guards on open sides of stairways, raised floor areas, balconies and porches shall have intermediate rails or ornamental closures which do not allow passage of a sphere 4 inches or more in diameter.

Exception: 1) The triangular openings formed by the riser, tread and bottom rail of a guard at the open side of a stairway are permitted to be of such a size that a sphere 6 inches cannot pass through.

2) Openings for required guards on the sides of stair treads shall not allow a sphere 4 3/8" to pass through.

Stairs: The maximum riser height shall be 7 3/4 inches. The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8". The minimum tread depth shall be 10 inches.

The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8".

Handrails: Shall be provided on at least one side of each stair flight of four risers or more. Handrails shall be continuous from above the top riser to the lowest riser of the flight and shall be not less than 34" and not more than 38" above the sloped plane adjoining the tread nosing. Handrails shall not encroach into the stair width more than 4 1/2".

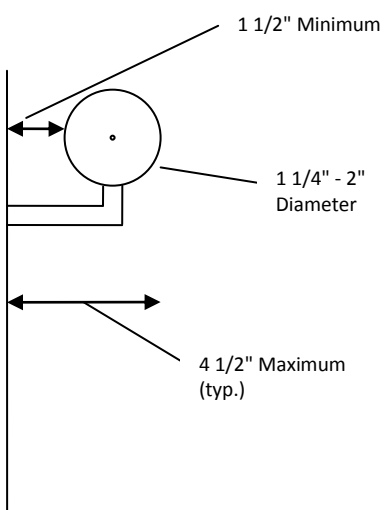
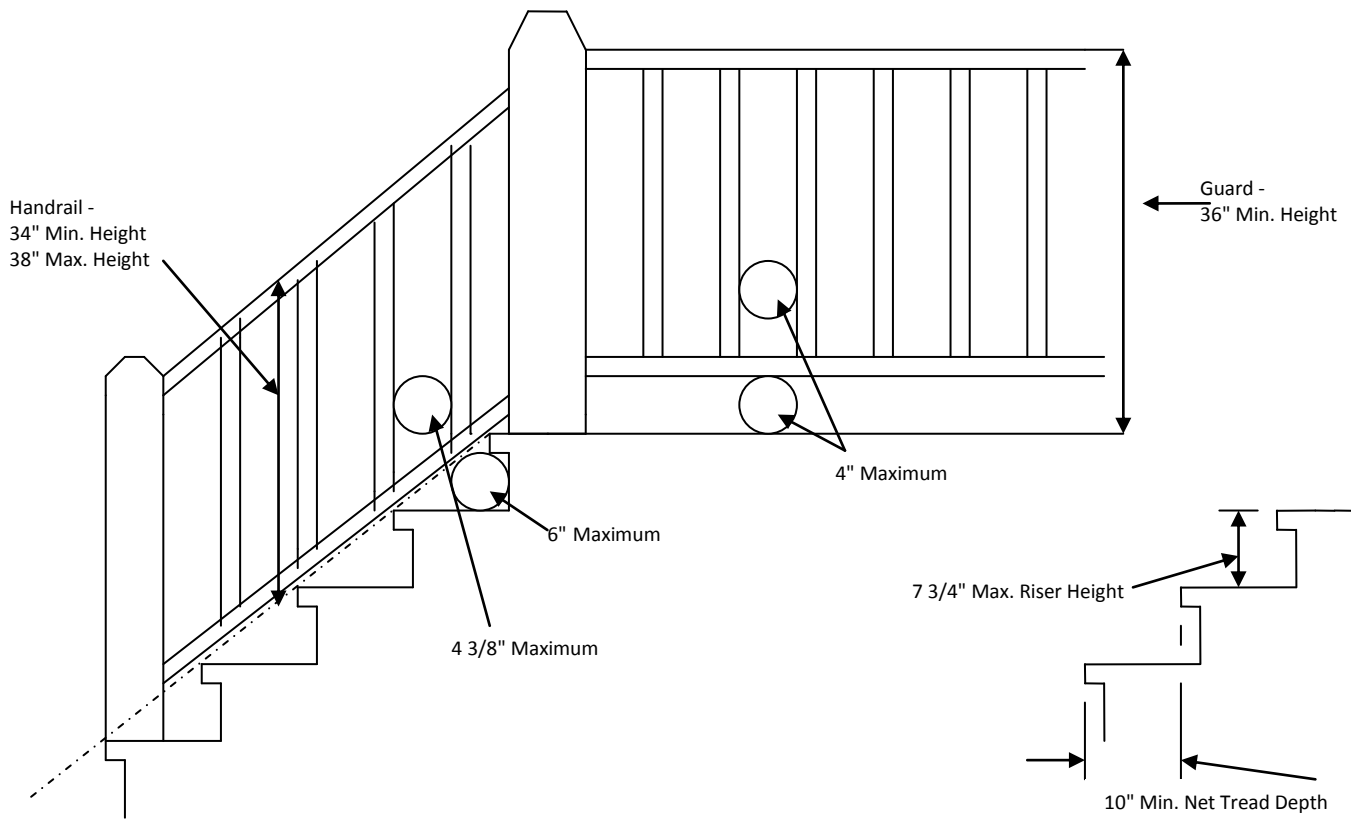
Handrail Termination: Handrails shall be returned or shall terminate in newel posts or safety terminals.

Handrail Shapes:

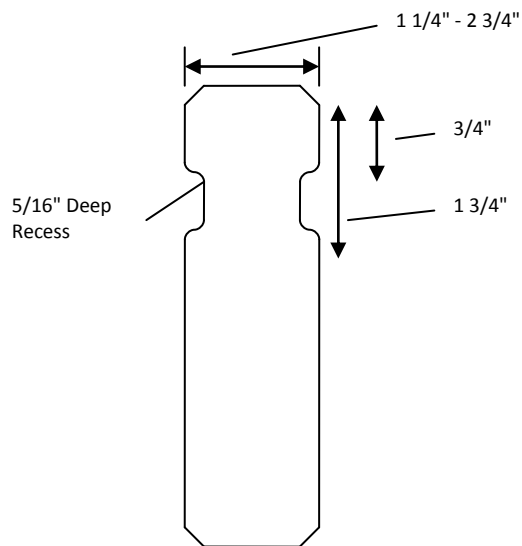
Type I -The handrail must be an approved shape for grasping while walking up or down the stairs. Handrails with a circular cross section shall have an outside diameter of at least 1 1/4" and not greater than 2". If not circular, the handrail shall have a perimeter dimension of at least 4" and not greater than 6 1/4" with a maximum cross section of 2 1/4".

Type II -Handrails with a perimeter greater than 6 1/4" shall provide a graspable finger recess (groove) on both sides of the profile. The finger recess shall begin within a distance of 3/4" measured vertically from the tallest portion of the profile and achieve a depth of at least 5/16" within 7/8" below the widest portion of the profile. This required depth shall continue for at least 3/8" to a level that is not less than 1 3/4" below the tallest portion of the profile. The minimum width of the handrail above the recess shall be 1 1/4" to a maximum of 2 3/4". Edges shall have a minimum radius of 0.01".

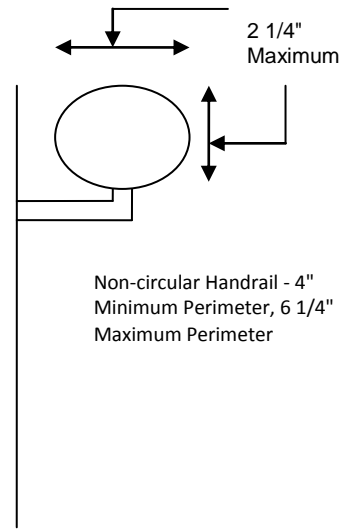
Electrical Service – Overhead electrical service power lines shall be at least 10' above the deck guard(s) and at least 12' above any walking surface.



Circular Handrail



Other Shapes



Non-circular Handrail

Deck Span and Dimension Table

Maximum allowable spans are based on #2 Southern Pine .40 Pressure Treated Lumber. Other species of lumber will have shorter spans than indicated in the table below.

Spans based on 40 psf live load and 10 psf dead load. L/360 live load deflection and exposed to weather (wet conditions).

Post & footing sizes are based on 2000 psf soil bearing and other assumptions for building a standard deck.

Note: No roof loads are assumed. Converting a deck to a porch or room will require larger posts & footings and/or more posts & footings.

Beam sizes are based on a maximum 2' cantilever (ends of joists overhanging the edge of the beam by 2')

Tall posts may require sway bracing.

Joist Size	Joist Spacing	Joist Max Span	Beam Size	Beam Max Span (Post Spacing)	Posts: Size & Max Height Above Grade			Footing Diameter	Corner Footing Diameter	Deck Boards Min Size
					4 x 4	4 x 6	6 x 6			
2x6	12" o.c.	10'-4"	2-2x6	6'-0"	12'	16'		14"	12"	5/4x6
2x6	16" o.c.	9'-5"	2-2x6	6'-3"	12'	16'		12"	12"	5/4x6
2x6	24" o.c.	7'-10"	2-2x6	6'-10"	12'	16'		12"	12"	2x4/2x6
2x8	12" o.c.	13'-8"	2-2x8	6'-9"	10'	12'	20'	16"	14"	5/4x6
2x8	16" o.c.	12'-5"	2-2x8	7'-2"	10'	12'	20'	16"	12"	5/4x6
2x8	16" o.c.	12'-5"	2-2x10	8'-10"	9'	12'	20'	18"	14"	5/4x6
2x8	24" o.c.	10'-2"	2-2x8	7'-8"	10'	12'	20'	16"	12"	2x4/2x6
2x8	24" o.c.	10'-2"	2-2x10	9'-6"	10'	12'	20'	18"	14"	2x4/2x6
2x10	12" o.c.	17'-5"	2-2x10	7'-9"	8'	10'	16'	20"	16"	5/4x6
2x10	16" o.c.	15'-10"	2-2x10	8'-0"	8'	10'	16'	18"	16"	5/4x6
2x10	16" o.c.	15'-10"	2-2x12	9'-2"	6'	10'	16'	20"	16"	5/4x6
2x10	24" o.c.	13'-1"	2-2x10	8'-7"	9'	10'	20'	18"	14"	2x4/2x6
2x10	24" o.c.	13'-1"	2-2x12	10'-0"	8'	10'	16'	20"	16"	2x4/2x6
2x12	12" o.c.	21'-2"	2-2x12	8'-3"	6'	8'	16'	22"	16"	5/4x6
2x12	16" o.c.	18'-10"	2-2x10	7'-5"	8'	8'	16'	20"	16"	5/4x6
2x12	16" o.c.	18'-10"	2-2x12	8'-7"	6'	8'	16'	20"	16"	5/4x6
2x12	24" o.c.	15'-5"	2-2x10	8'-2"	8'	8'	16'	18"	14"	2x4/2x6
2x12	24" o.c.	15'-5"	2-2x12	9'-5"	6'	8'	16'	20"	16"	2x4/2x6

Deck Ledger Fastening

Joist Span	6' or less	6'1" – 8'	8'1" – 10'	10'1" – 12'	12'1" – 14'	14'1" – 16'	16'1" – 18'
Construction details	On-center spacing of fasteners						
½" diameter lag	30	23	18	15	13	11	10
½" diameter bolt	36	36	34	29	24	21	19

Fastener spacing

- 1) deck ledger shall be minimum 2X8
- 2) lag screws or bolts shall be placed 2 inches in from the top or bottom of the deck ledger board and between 2 and 5 inches in from the ends. Fasteners shall be staggered from the top to the bottom along the horizontal run of the deck ledger